

HW #15

STANDARD FORM Graph the equation. Label any intercepts.

31. $x + 4y = 8$

34. $y = -2$

For each given function complete the following:

- Label and graph the parent function
- Describe the horizontal shift of the child function
- Describe the vertical shift of the child function
- Describe the vertical stretch of the child function
- Using interval notation, give the domain & range of the child function
- Graph the child function

5. $y = |x + 4| - 2$

AVERAGE RATE OF CHANGE Find the average rate of change in y relative to x for the ordered pairs. Include units of measure in your answer.

24. $(2, 12), (5, 30)$ x is measured in hours and y is measured in dollars

One beautiful, December day in Denver, CO, the snow began to fall. After 4 hours of snowfall, the snow depth was 8 inches. After 6 hours of snowfall, the snow depth was 9.5 inches.

- Write the given function between time and snow depth as a **table** below.
- Use the table to write an **equation** that represents the function.
- What is the meaning of the **slope** in this equation?
- How much snow will be on the ground after 10 hours of snow fall?

GRAPHING INEQUALITIES Graph the inequality in a coordinate plane.

7. $x < 3$

8. $x \geq 6$

9. $y > -2$

11. $y \leq -2x - 1$

12. $y < 3x + 3$